

A NEW SPECIES OF *EUPHYES* SCUDDER FROM TEXAS
(HESPERIIDAE)

H. A. FREEMAN

1605 Lewis Drive, Garland, Texas 75041

***Euphyes macguirei* Freeman, new species**

Male. Upper side: Primaries dark brown. Well developed, black stigma extending from vein 1 to the cell. Four discal spots of about equal size which extend from space 1b to space 3 in a straight line, just outside of the stigma. There may be present a minute phantom spot in space 5. There is only one apical spot present and that one is in space 6. Fringes light fulvous, unchecked.

Secondaries dark brown with a distinct fulvous streak in the cell. Fringes light fulvous, unchecked.

Under side: Primaries, apex and costal area yellowish-brown, the cell and base of wings black with the remainder light brownish-black. Discal spots in spaces 2 and 3 bright fulvous. A broad yellowish-white spot in space 1.

Secondaries, chocolate brown with veins yellow. A distinct fulvous streak extending throughout the cell to near the marginal border.

Thorax above dark brown, beneath lighter in coloration. Abdomen above dark brown, beneath sordid white. Head heavily overscaled above with greenish-yellow hair-like scales. Palpi bright yellow with a few scattered black scales present. Legs yellowish-brown. Antennae, shaft black ringed obscurely with yellow, and the club black above, beneath the shaft is more yellowish and the club is yellow at the base and the apiculus, the remainder black.

Wing measurements: Holotype ♂, primaries: base to apex, 13.5 mm; apex to outer angle, 9 mm; outer angle to base, 11 mm. Secondaries: base to end of vein 3, 11 mm; center of costa to anal angle, 10 mm. Total expanse of mounted specimen, 29 mm.

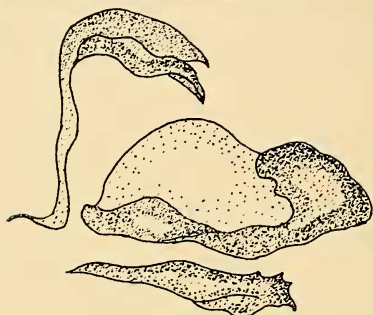
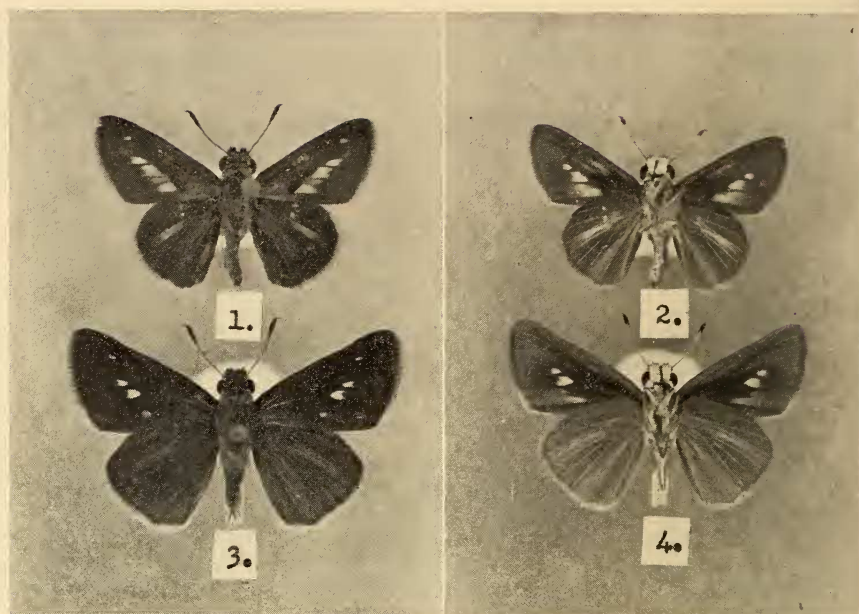
Female. Upper side: Primaries dark brown. A small circular fulvous spot in space 1 situated inward from the spot in space 2. In space 2 there is a bright fulvous, oval spot. In space 3 there is a narrow, somewhat elongated, bright fulvous spot centered over the outer half of the spot in space 2. In space 6 there is a linear apical spot of the same bright fulvous coloration as the discal spots. Fringes light fulvous, unchecked.

Under side: Primaries, costa, apex and extending two thirds down the outer margin yellowish-brown, with the veins yellowish. Base and remainder of wings brownish-black. A narrow, linear, yellowish spot in space 1a. In space 1b there is a minute, yellowish dot situated directly below the spot in space 2. Discal spots in spaces 2 and 3 bright fulvous. Fringes dark brown except at the outer angle where they become fulvous.

Secondaries, light, yellowish-brown, with veins yellow. An indistinct, fulvous, streak in the cell area extending from base to outer margin. Anal angle is brownish-black.

Thorax above dark brown, beneath yellowish-brown in coloration. Abdomen dark brown above, beneath yellowish-white, with an indistinct brown line down the center. Head brown, heavily overscaled with fulvous hair-like scales. Palpi bright yellowish-white, with a few scattered black scales present. Legs yellowish-brown. Antennae same as males.

Wing measurements: Allotype ♀, Primaries: base to apex, 16.5 mm; apex to



5.

Figs. 1 & 3, *Euphyes macguirei* Freeman, holotype ♂, Benbrook Res., Tarrant Co., Texas, 6 Oct. 1973, W. W. McGuire. 2 & 4, *Euphyes macguirei* Freeman, allotype ♀, Benbrook Res., Tarrant Co., Texas, 6 Sept. 1973, W. W. McGuire. 5, Male genitalia, *Euphyes macguirei* Freeman, paratype, Benbrook Res., Tarrant Co., Texas, 19 Sept. 1973, W. W. McGuire.

outer angle, 10.5 mm; outer angle to base, 13.5 mm. Secondaries: base to end of vein 3, 13 mm; center of costa to anal angle, 12 mm. Total expanse of mounted specimen, 33.5 mm.

Type material. Holotype ♂, Benbrook Res., Tarrant Co., Texas, 6 Oct. 1973, W. W. McGuire collector, will be placed in the American Museum of Natural History, New York. Allotype ♀, same location and collector, 6 Sept. 1973, in the collection of H. A. Freeman. There are three male paratypes from the same location

and collector, one ♂, 6 Oct. 1973, and one ♂, 13 Sept. 1973, are in the collection of W. W. McGuire, and one ♂, 19 Sept. 1973 in the H. A. Freeman collection. All specimens are "ex larvae," reared on *Carex* sp. by W. W. McGuire.

This new species seems to be intermediate between *Euphyes dion* (Edwards) and *E. bimacula* (Grote & Robinson). It differs from *E. dion* in the following ways: (1) smaller size; (2) more elongated fulvous streak throughout the cell in the ♂♂ on the secondaries; (3) the absence of fulvous markings between the stigma and the base of the wings; (4) the yellowish veins on the lower surface of the secondaries, which are absent or else poorly defined in *dion*; and (5) in the genitalia. It differs from *E. bimacula* in the following ways: (1) smaller size; (2) the presence of a fulvous streak throughout the cell on the secondaries; (3) the darker fringes of the wings; (4) *bimacula* may or may not have fulvous markings between the stigma and the base of the wings on the upper side of the primaries which are completely absent in *macguirei*; (5) on the lower surface of the secondaries in *bimacula* the veins are usually concolorous with the rest of the wing, while in *macguirei* they are yellowish being lighter than the ground color; (6) in *macguirei* all discal spots are much brighter fulvous than in *bimacula*; and (7) the genitalia are different.

I take great pleasure in naming this new species for my good friend, Dr. W. W. McGuire of Galveston, Texas, who collected the type series and is doing such outstanding work on the American Hesperioidea.

ACKNOWLEDGMENT

I would like to express my deepest thanks to the National Geographic Society which made this study possible.